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ABSTRACT

Evaluated was a program designed to provide individualized supplementary instruction in reading and mathematics for two populations of handicapped children--mentally retarded and neurologically impaired-emotionally handicapped in 34 schools in New York City. Among findings were that statistically significant gains were made on both reading and mathematics subtests of the Wide Range Achievement Test, and that problems were of an administrative nature and easily correctable. Recommendations included that teachers be given more latitude in deciding on the children eligible and amount of instruction each pupil would receive, that only experienced teachers be hired, that teacher trainers have a more defined job role, and that physical space allocations be carefully examined. (Test results are appended.) (IM)

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EVALUATION REPORT

Function No. ~~09-59605~~ (b)
09-58691

SUPPLEMENTARY READING AND MATHEMATICS INSTRUCTIONAL SKILLS PROGRAM FOR HANDICAPPED CHILDREN

(1974-1975)

U S DEPARTMENT OF HEALTH, EDUCATION & WELFARE
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Jay Gottlieb, Ph.D.

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An evaluation of a New York City School district educational project funded under Title I of the Elementary and Secondary Education Act of 1965 (PL 89-10) performed for the Board of Education of the City of New York for the 1974-1975 school year.

EC093205

Dr. Anthony J. Polemeni, Director

BOARD OF EDUCATION OF THE CITY OF NEW YORK
OFFICE OF EDUCATIONAL EVALUATION
110 LIVINGSTON STREET, BROOKLYN, N. Y. 11201

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Chapter I: The Program

The Supplementary Reading and Mathematics Instructional Skills program for handicapped children was designed for pupils with a variety of handicapping conditions. However, the present report was confined to two of these populations, the mentally retarded (CRMD) and the neurologically impaired-emotionally handicapped (NIEH). The remaining handicapped populations are the subject of separate evaluation reports.

The proposal indicated that 1,000 CRMD and 250 NIEH pupils would be served by the program. Although it is extremely difficult to determine the exact number of children who participated in the program due to the transient nature of the population, the best estimate is that 857 CRMD and 232 NIEH pupils were involved in the program at one time or another during the 1974-1975 school year.

All CRMD and/or NIEH pupils who attended a school involved in the present funding program received supplementary services as dictated by the proposal. Most frequently, the pupils were instructed individually or in groups of two. On occasion, groups of more than two children were constituted, but these larger groups appeared in relatively few instances. For the most part, children were instructed two to three times a week, for periods of approximately 40 minutes. Here, too, some variance existed among schools, with some children being tutored for as little as 30 minutes and others for as much as 50 minutes per session.

The CRMD and NIEH parts of the program were distributed across 34 school buildings. A more refined breakdown includes 25 schools for CRMD pupils and 12 for NIEH children. Of the 25 schools servicing CRMD pupils, 8 were located in Brooklyn, 4 in Manhattan, 5 in Queens, 6 in the Bronx, and the remaining 2 in Richmond.

The teachers in the program represented a wide range of professional training and experience. The majority of teachers were licensed in Common Branches and had between 2 and 5 years of prior teaching experience. The variety of experiences was reflected in different teaching styles, a topic that will be explored in greater detail later in the report.

Seven teacher trainers were also involved in the program, although the same seven trainers were not involved for the entire year. Two trainers left during the middle of the year to take other positions.

The teacher trainers occupied a critical role in the conduct of the program, serving as supervisors to the teachers, consultants, bearers of educational materials, and workshop leaders. On the average, the trainers visited each school once every second week, although this figure varied depending on the time of the year and the need in particular schools. The teacher trainers were the professionals on whom the teachers relied most heavily when they required assistance.

In addition to the teacher trainers, guidance counsellors and school psychologists were available to the Title I teachers on an as-needed basis. However, since there were only four guidance counsellors and three school psychologists available to serve some 90 teachers and more than 2,600 pupils in the entire program, the services were not funnelled to all teachers and children who may have required them.

Educational assistants were available to the teachers of NIEH children but not to the teachers of the CRMD pupils.

The project coordinator and assistant coordinators made periodic visits to the schools to observe the performance of the teachers in addition to attending to the other administrative duties that accompany so large an educational program.

Prior to and concurrent with the implementation of the program, workshops were conducted for the teachers. The purpose of the workshops was to provide teachers with diagnostic and prescriptive techniques that would be appropriate for the population of children with whom they would be working. More specifically, the workshops concentrated on task analyses, the development of short and long-term educational objectives, the development of teacher-made educational materials, and the effective use of audio-visual materials. In addition to providing the teacher some insights regarding the structuring of an educational plan for each child, the workshops were intended to provide some consistency in the way the program was implemented in the more than 90 schools in which it operated.

The program began on October 1, with a two-week orientation and workshop session after which the teachers began the program in their respective schools. The first weeks of the school-based operation were devoted to formal and informal assessment of the pupils' abilities and weaknesses. Not all teachers employed the same assessment battery, although many employed the Key math, Durrell Analysis of Reading Difficulties, and the Woodcock as part of their assessment program. In addition to the achievement-related diagnostic work-up, teachers also observed the pupils' socio-emotional behavior, employing a form developed by the program personnel. This form, the Classroom Observation Profile, delineated 30 behaviors which were clustered into 5 domains: social-emotional-adaptive, communication-language, visual-perceptual, perceptual-motor and motor coordination, and, finally, academic/ educational. The entire diagnostic work-up of each child resulted in the formulation of a preferred learning mode, grouping recommendations and specific behavioral objectives.

The brief program description just provided offers a context against which to evaluate the two major objectives of the program: (1) to effect statistically significant improvement in the pupils' reading ability, and (2) to effect statistically significant improvement in the pupils' mathematics ability.

Chapter II: Evaluative Procedures

The evaluation design for the Supplementary Reading and Mathematics Instructional Skills Program for Handicapped Children delineated three objectives of the evaluation:

1. To determine whether as a result of participation in the program, the reading grade of the participant will show a statistically significant difference between the real post-test score and the anticipated post-test score.

2. To determine whether, as a result of participation in the program, the mathematics grade of the participant will show a statistically significant difference between the real post-test score and the anticipated post-test score.

3. To determine the extent to which the program, as actually carried out, coincided with the program as described in the Project Proposal.

The evaluator must indicate at the outset of this chapter that the statistical procedures employed to determine objectives 1 and 2 were not those described in the Evaluation Design. After consultation with the Office of Educational Evaluation liaison the decision was made to determine whether the first two objectives were achieved on the basis of a correlated t- test performed on standard scores, not on the basis of an historical regression formula employed on grade-equivalent scores. The reason for using

standard scores was that many CRMD children have pretest grade equivalent levels below 1.0, as measured by the WRAT. Since the historical regression scoring procedures require that a score of 1.0 be subtracted in order to calculate the expected growth of the pupil, many CRMD pupils would have had an expected growth of less than 0. This was clearly untenable. The use of standard scores circumvents this problem in two ways. First, there are no scores of 0 with which to contend. Second, the standard score is derived from age-normed tables and offers the advantages of a built-in growth expectation for six month intervals. The six month interval of the WRAT norms corresponds to the modal pre-posttest interval for the pupils who were being evaluated. That is, most of the pretesting was conducted during late November and posttesting during late May. There were, of course, exceptions to this generalization.

For the population of 852 CRMD pupils who comprised the participants of the funding program pretest and posttest data were available for 820, or 96.24%. Of the 820, 789 were administered the level I form of the WRAT while the remaining 31 were given level II. As indicated in the MIR forms appended to this report, most of the children who did not receive pre- and posttesting had either moved from the neighborhood unexpectedly or else had been absent during the posttesting.

Pre- and posttest data were available for only 180 (78%) of the 232 pupils who comprised the NIEH population. The evaluator is only able to account for 8 of the missing 52 cases with any degree of certainty. These 8 cases were absent during the posttest. As far as the remaining 44 cases are concerned, the project director informed the evaluator that programs in two schools were moved to a tax-levy support base and posttest data probably were not collected. Pretest data, however, were available for these two schools.

Chapter III: Findings

The findings of the evaluation will be presented separately for each objective and population. That is,separate analyses and discussion will be reported for the reading and mathematics objectives, and separately for the CRMD and NIEH pupils. However, the third objective, namely the extent to which the program was being implemented in accordance with the proposal, will be discussed as a single unit across the subject-matter content and populations of children.

---- CRMD pupils

The first objective of the proposal was to determine whether the pupils would achieve statistically significant gains in reading achievement. As is indicated in Table 1 where the means, standard deviations and correlation coefficient are presented, the objective was fulfilled at a high degree of confidence, both for children who were administered the level I form and those who were administered level II. Inspection of the mean differences between the elementary school children who uniformly were administered level I and the junior high school pupils who were administered level II indicates that the latter's mean increase was 4.27 standard score units, or more than double that for the former. Two possible explantions for this finding are possible. The first is that the program was more successful at the junior high school level. The second, and probably more plausible, explanation was that the more capable children were administered level II, and the more capable children were the ones who gained the most from the program.

The second objective of the program was to determine whether the participating pupils would make statistically significant gains in mathematics achievement. As can be seen in Table 2 where the relevant data are presented, the second

objective of the program was also achieved with the CRMD pupils. For the 773 pupils who were administered the level I form, their mean increase of 4.27 points was statistically significant at the .001 level. Similarly, the mean increase from pre- to posttest for the 29 pupils who were administered level II was 5.76 standard score points, also significant beyond the .001 level.

----NIEH pupils

Objective 1 for the NIEH population was identical to that for the CRMD pupils; to demonstrate whether statistically significant gains in reading achievement were obtained. The relevant data appear in Table 3 and indicate that the mean posttest score of 78.90 was significantly greater than the mean pretest score of 76.78. As before, the data are in standard score units. A comparison of the mean reading pretest scores for the CRMD and NIEH pupils who were administered level I may serve to validate the differential diagnosis of the two groups, at least with respect to reading ability. The NIEH children's pretest mean score was 12.50 points higher than that for the CRMD pupils.

Statistically significant gains between pre- and posttest were also obtained from the mathematics data. Table 4 reveals the means and standard deviations for these data and demonstrates the magnitude of the difference. The mean difference of 4.56 standard score points was significant at the .001 level of confidence. Again, the NIEH pupils scored considerably higher than the CRMD children. The 10 point difference between the two diagnostic groups is similar in magnitude to the 12 point difference that was obtained on the reading data.

To summarize the first two objectives, the data indicated that both the CRMD and the NIEH pupils improved significantly from pre- to posttesting on reading and on mathematics achievement.

7a

Table 1

Means and Standard Deviations for Pre- and Posttest Reading Scores (CRMD)

	Level I		Level II	
	Pretest[1]	Posttest	Pretest	Posttest
Mean	64.28	66.22	68.71	73.32
S.D.	6.19	10.14	7.17	7.62
N	789		31	
r	.87		.87	
t-value	9.70		6.76	
p	.001		.001	

[1] All data based on Wide Range Achievement Test (WRAT)

Table 2

Means and Standard Deviations for Pre- and Posttest Mathematics Scores (CRMD)

	Level I		Level II	
	Pretest[1]	Posttest	Pretest	Posttest
Mean	65.05	69.32	68.52	74.28
S.D.	9.43	10.76	4.66	4.80
N	773		29	
r	.79		.49	
t-value	17.79		6.49	
p	.001		.001	

[1] All data based on WRAT

Table 3

Means and Standard Deviations for Pre- Posttest Reading Scores (NIEH)

	Pretest[1]	Posttest
Mean	76.78	78.90
S.D.	12.53	13.41
N	180	
r	.91	
t-value	5.31	
p	.001	

[1] All test data based on Level I of WRAT

Table 4

Means and Standard Deviations for Pre- Posttest Mathematics Scores (NIEH)

	Pretest	Posttest
Mean	80.40[1]	84.96
S.D.	13.98	15.16
N	180	
r	.85	
t-value	7.60	
p	.001	

[1] All test data based on Level I of WRAT.

The third objective of the evaluation design was to determine whether the program, as implemented, followed the Project Proposal. Obviously, a program of so vast a scope obviates a simple yes or no answer to this objective. Many features of the program were carried out according to the dictates of the proposal. Some were not. A brief review of some of the purposes of the project, as indicated in the proposal, will help elucidate some of the aspects of the program that require discussion.

The proposal indicated that the program would provide a variety of multi-media materials, programmed instructional materials, film-strips, games, etc. would be provided for small group work. The teachers were to facilitate pupils' achievement by encouraging verbal communication of their perceptions. In general, mathematical and verbal features of experience were to be emphasized to encourage children's academic performance. The proposal further indicated that the Title I teacher would work closely with the classroom teachers. Also, parent participation was to be encouraged.

Training and supervision of the teachers was to be provided by the coordinator and two assistant coordinators. Additional supervision was to be provided by seven teacher trainers whose role description indicated that they would be master teachers experienced and skilled not only in traditional approaches but in innovative approaches as well.

Finally, the pupils themselves were to be selected on the basis of direct observation of the pupils in the classroom, teacher estimation, individual test performance, and data from pupil records. Within the context of the above program descriptors, as well as some others that are closely related, the third objective can be evaluated.

There is little doubt that the program was serving the children for whom it was intended. Every special class child in all schools (CRMD and NIEH pupils)

were receiving instruction from the Title I teachers. That is, the Title I teachers were not selective but rather worked with every child in the school who was screened, evaluated and placed in special classes for either CRMD or NIEH pupils. There were some exceptions to the last statement, but the exceptions were very infrequent.

All participating teachers employed some form of diagnostic information in determining an appropriate course of instruction for each pupil. The diagnostic workup invariably included the Classroom Observation Profile. In addition, many teachers, although not all, included the Key Math and the WRAT results in their assessment battery. A disconcerting aspect of the diagnostic assessment was the great variability with which it was implemented. In some instances the information gathered was based on a single instrument. Other teachers developed rather elaborate diagnostic procedures to plan their instructional program.

If there was variability in the nature of the information obtained for diagnostic purposes there was even more variability in the manner that the information was used to develop instructional strategies. Much of the variability in this regard undoubtedly emanates from the differing training and experience base with which the teachers came to the program. Teachers with special education backgrounds tended to employ the diagnostic information to develop perceptual training activities that were used as a precursor to formal reading instruction. Teachers who had several years of regular classroom experience employed the assessment information to construct developmental reading programs that had less emphasis on perceptual activities. Inexperienced teachers who had neither the special education background nor a reservior of experience from which to draw developed a reading program on a trail-and-error basis.The evaluator does not know which of the first two

instructional approaches resulted in greater achievement gains for the pupils, but clearly such information would prove useful for the program personnel.

Another feature of the program which requires comment is the heavy emphasis placed on reading instruction, at the expense of arithmetic. While the proposal does not make clear whether equal attention was to be given to reading and math, this was not the case as the program unfolded. The evaluator estimates that 80% of the instructional time was devoted to reading with the remaining time devoted to math. The fact that the CRMD children scored no worse on reading than math, coupled with the fact that the NIEH pupils did better on math than reading illustrates that the heavy emphasis on reading was probably the correct strategy.

The reading and math instruction must be considered in light of the materials that were available to the teachers. The Project Proposal placed heavy stress on the multi-media nature of educational materials that were to be an integral part of the program. Most teachers did not receive the materials they requested until mid February. Some teachers still had not received all their materials at the end of May. As a result, relatively inexperienced teachers who had not accumulated their own materials over the years were desperate for materials. The lack of materials was felt less intensely by teachers who had their own.

It should be mentioned that the reason for the lack of materials was <u>not</u> related to any neglect by the program administrators. The rapid change in the cost of materials required new purchase orders to be filled out and approved every time the cost of materials was increased. This understandable policy of the Board resulted in a lack of materials for this program.

Many of the problems that resulted from the variability in which the program was implemented could have been corrected had more teacher trainers been available. The seven trainers who were available were spread so thin that they visited each of their schools approximately one day every second week. Had the number of trainers been doubled, they could have executed their required duties more effectively. Similarly, two assistant coordinators is an insufficient number if they are to be out in the field supervising the trainers and teachers. The need for additional management personnel was even more critical considering that this was the first year of the program's operation and many more problems were to be expected than if the program had been operational for several years.

The teacher trainers did not function in similar capacities. Some assisted in lesson development primarily, others were conduits for materials, still others focused on developing suitable diagnostic work-ups. However, while it is necessary for teachers to have a focused approach to the program, there is less need for the trainers to operate uniformly. Each trainer was confronted with different problems which required different solutions. The evaluator's main criticism was that they did not have sufficient time to do what they were supposed to do. Their professional competence was certainly not at issue.

Two final points bear scrutiny, one of direct concern to the proposal requirement, the other not stemming directly from the project proposal. The first point concerns the nature of communication between the Title I teachers and the classroom teachers. With only two or three exceptions, there was little systematic communication between the two groups. What communication did occur was conducted on a catch-as-catch-can basis. There were informal meetings arranged on the spur of the moment, with no formal meeting time designated for this purpose. The evaluator has conducted approximately 18 special education evaluations and has never witnessed a supplementary program succeed

in developing an articulated program between special education and regular education without formally designated meeting time provided by the school and/or project administrators. The same is true when communication is required between different special education groups, such as supplementary teachers and regular class CRMD teachers, for example. Structuring an effective articulated program between the two groups is not easy to effect. But it is certainly critical and was justifiably included in the Project Proposal. For the communication to succeed, the CRMD and NIEH supervisors must agree to cooperate fully. The extent of their cooperation is not known to the evaluator.

The second point of importance regards the physical space allocation afforded the program in each school building. This is often a serious problem for a variety of reasons including the pressing space problems in most schools, principals' generally negative attitudes to special education programs in their school buildings, and some principals' uncertainty as to whether the special educational supplementary teacher is under his jurisdiction and part of his faculty. As a result of variance in the three above-mentioned points, it is not surprising that the space allocated for the supplementary program varied from absolute affluence to complete poverty. Some teachers had well-lit, large classrooms situated so as to have few external distractions. Other programs operated under the most squalid conditions, in stair wells that were not heated, guidance counselors' waiting rooms that were heavily travelled, storage closets, teachers' rooms, and in one instance, an unused lavatory. When the evaluator brought this fact to the attention of the project coordinator, she acted very quickly and had this last program transferred to another school building.

While the program had some difficulties, it had many strong points. It is the evaluator's opinion based on visits to the Title I program and to some regular classroom programs that the academic instruction provided by this program constituted the bulk of effective instruction the children

received. The program did function effectively toward the end of the school year when most teachers had their materials and an established routine was in effect. In the evaluator's judgment, it will function even more effectively if it is continued next year.

Chapter IV: Summary of Major Findings, Conclusions, Recommendations

The evaluation of the Supplementary Reading and Mathematics Instructional Skills Program for Handicapped Children indicated that statistically significant gains were made on both reading and mathematics subtests of the WRAT. Further, significant gains were posted by the CRMD and NIEH pupils who participated in the program. There was considerable variability in the nature of program implementation, the third objective of the evaluation design. While the proper children were being served by the program, all of them were not selected strictly in accordance with the proposal requirement that they be two or more years retarded in reading and/or math. While it is true that the vast majority of children were retarded in reading and/or math, the evaluator's conversations with the Title I teachers indicated that all CRMD and/or NIEH children in a school were selected for participation and that the issue of two years reading and/or arithmetic retardation was of secondary concern.

Also with regard to the third objective, materials were late in arriving, additional administrative personnel were required, and communication between Title I teachers and their CRMD classroom colleagues was not up to par. Despite these shortcomings, the children did receive instructional support on an individual basis, did achieve significant increases in tested achievement and undoubtedly benefitted from the individual instruction they received. With the population of pupils for whom this program was intended, the fact of individual instruction, and successful instruction at that, more than compensates for any deficiencies that existed. The evaluator might add that the deficiencies are easily correctable. Many problems were simply the result of a very large, new program "getting off the ground."

Based on the evaluative data, the following recommendations are advanced:

1. Teachers should be given more latitude in deciding on the children with whom they will work and on the amount of instruction each pupil will receive. The evaluator is suggesting that rather being bound to work with all children who are two or more years retarded in reading and/or math, and being forced to structure a work schedule around this number of children, teachers should be allowed to work with some children more intensely and other children less intensely. The evaluator is <u>not</u> suggesting that the teachers' work load be reduced, only that they be allowed to re-structure their workload as they deem fit to provide the greatest amount of assistance for the largest number of children. Of course, the teachers should confer with their immediate supervisors before initiating such action.

2. Only teachers with prior teaching experience should be hired. With this difficult population of children, inexperienced teachers are placed in an untenable situation.

3. Teacher trainers must have a more defined and structured job role. They must be provided with stricter guidelines so that they will function more uniformly. In this regard, heavy emphasis should be placed on demonstration teaching. This was part of the trainers' job description, but was seldom carried out to the evaluator's knowledge.

4. Greater care must be given to decisions regarding the school building that will house the program. If physical space allocations are inadequate in any given building, the program would serve children better if it were located in a different school.

5. The pre-service training phase of the program could be shortened to include only administrative information required by the teachers. In-service training, on the other hand, should be provided after the teachers had the opportunity to interact with their pupils. In other words, the development of the Classroom Observation Profile and instruction in behavioral objectives

should be provided during in-service training and not during pre-service training.

6. Teachers should have the opportunity to meet with each other on a regularly scheduled basis to share ideas, problems, etc.

7. The program provided a valuable service to children in need of intensive academic instruction. In judging its merits one cannot help but conclude that it should be continued.

SUPPLEMENTARY READING AND MATHEMATICS INSTRUCTIONAL SKILLS PROGRAM FOR HANDICAPPED CHILDREN
Function No. 09-59605 (b)

Use Table 30C. for norm referenced achievement data not applicable to tables 30A. and 30B.

30C. Standardized Test Results

In the table below, enter the requested information about the tests used to evaluate the effectiveness of major project components/activities in achieving desired objectives. Before completing this form, read all footnotes. Attach additional sheets if necessary.

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Component Code	Activity Code	Test Used[1]	Form		Level		Total N[2]	Group ID[3]	Number Tested		Pretest			Posttest			Statistical Data		
			Pre	Post	Pre	Post			N[4]	Score Type[5]	Date	Mean	SD[6]	Date	Mean	SD[6]	Test[7]	Value[8]	Level[9]
60861715		WRAT			I	I	820	61	789	4	11/74	54.3	6.19	5/75	66.2	10.1	t	9.70	.001
60861715		WRAT			II	II	32	61	31	4	11/74	68.71	7.17	5/75	73.3	7.62	t	6.76	.001
60961715		WRAT			I	I	820	61	773	4	11/74	65.05	9.43	5/75	69.3	10.7	t	17.79	.001
60961715		WRAT			II	II	32	61	29	4	11/74	68.52	4.66	5/75	74.3	4.80	t	6.49	.001
60861715		WRAT			I	I	232	61	180	4	1/75	76.78	12.5	5/75	78.9	13.4	t	5.31	.001
60961715		WRAT			I	I	232	61	180	4	1/75	80.40	14.0	5/75	85.0	15.	t	7.60	.001

1/ Identify Test Used and Year of Publication (MAT-58; CAT-70, etc.)
2/ Total number of participants in the activity
3/ Identify the participants by specific grade level (e.g., grade 3, grade 5). Where several grades are combined, enter the last two digits of the component code.
4/ Total number of participants included in the pre and post test calculations.
5/ 1 = grade equivalent; 2 = percentile rank; 3 = Z Score; 4 = Standard score (publisher's); 5 = stanine; 6 = raw score; 7 = other.
6/ S.D. = Standard Deviation
7/ Test statistic (e.g., t; F; X^2).
8/ Obtained value
9/ Specify level of statistical significance obtained (e.g., $p \leq .05$; $p \leq .01$).

OFFICE OF EDUCATIONAL EVALUATION - DATA LOSS FORM
(attach to MIR, item #30) Function # 09-59605 (b)

In this table enter all Data Loss information. Between MIR, item #30 and this form, all participants in each activity must be accounted for. The component and activity codes used in completion of item #30 should be used here so that the two tables match. See definitions below table for further instructions.

Component Code	Activity Code	(1) Group I.D.	(2) Test Used	(3) Total N	(4) Number Tested/ Analyzed	(5) Participants Not Tested/ Analyzed		(6) Reasons why students were not tested, or if tested, were not analyzed	
						N	%		Number/ Reason
6 0 8 6 1 C R M D	7 1 5	61	WRAT	820	789	31	3.78%	25 children were absent or moved	
								6 children could not be tested	
6 0 8 6 1 N I E H	7 1 5	61	J AT	232	180	52	22.41%	8 children moved; 2 schools dropped	
								from program and moved to tax-levy	
6 0 9 6 1 C R M D	7 1 5	61	WRAT	820	773	47	5.73%	25 children were absent or moved	
								22 could not take test	
6 0 9 6 1 N I E H	7 1 5	61	WRAT	232	180	52	22.41%	8 children moved or absent; 2 schools	
								dropped	

(1) Identify the participants by specific grade level (e.g., grade 3, grade 9). Where several grades are combined, enter the last two digits of the component code.
(2) Identify the test used and year of publication (MAT-70, SDAT-74, etc.).
(3) Number of participants in the activity.
(4) Number of participants included in the pre and posttest calculations found on item#30.
(5) Number and percent of participants not tested and/or not analyzed on item#30.
(6) Specify all reasons why students were not tested and/or analyzed. For each reason specified, provide a separate number count. If any further documentation is available, please attach to this form. If further space is needed to specify and explain data loss, attach additional pages to this form.